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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,175	12/13/2002	Leonard E. Bensch	440566/PALL	8864
23548	7590	05/03/2006	EXAMINER	
LEYDIG VOIT & MAYER, LTD 700 THIRTEENTH ST. NW SUITE 300 WASHINGTON, DC 20005-3960			PHAM, HOA Q	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/088,175	BENSCH ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Hoa Q. Pham	2877	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 22 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7,10,12-16,18,19,21-33 and 37-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 37-45 is/are allowed.
- 6) ☒ Claim(s) 1-7,10,12-16,18,19,21 and 26-33 is/are rejected.
- 7) ☒ Claim(s) 22-25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Drawings*

1. The drawings filed on 9/16/05 have been approved.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7, 10, 12-16, 18-19, 21-30, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein (WO 96/31764) (of record) in view of Altemose et al (WO 98/46984) (of record).

Regarding claims 1, 10, 27 and 33, Klein discloses a method and apparatus for quantitative particle determination in fluid comprising a water sensor coupled to a non-aqueous liquid (i.e., milk, oil, lubricants, etc..) to sense an indication of the water content of the non-aqueous liquid (page 27, lines 4-15 and page 30, lines 11-24); and an optical particle counter coupled to the none-aqueous liquid to provide an indication of the number of particulates present in the non-aqueous liquid (page 1, lines 4-6, page 3, lines 2-16). Klein does not explicitly teach that the system includes both a water sensor and an optical particle counter; however, the teaches of a system having both sensor for measuring different characteristics are well known in the art as taught by Altemose et al. Altemose et al discloses a method and system for sensing water in liquids comprises

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both a water sensor and a temperature sensor (see figures 1, 2, 4 and 8). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Kein by including both water sensor and an optical particle counter in a system as taught by Altemose et al. The rationale for this modification would have arisen from the fact that using a system having both sensor units would increase the speed of measurement and reduce the cost of the device.

Regarding claim 2, see figure 1c of Klein.

Regarding claims 6, 7, 13, 15, 16, and 19; Klein teaches discloses the use of a "sensor for determining whether a detector response exceeds a level exceeding a predetermined value which is equivalent to some limit, for example, the device could be set to indicate when the water content in a lubricant exceed 0.5%" (see page 30, lines 18-24).

Regarding claims 12, 14, 18, and 19; figure 1c of Klein teaches that the processing means (6) is coupled to the particle counter (10).

4. Claims 3-5, 21, 26, 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein and Altemose et al as applied to claims above, and further in view of Lepper, Jr. (3,787,122).

Regarding claims 3-5, 26, and 28-30, Klein and Altemose et al do not explicitly teach the water sensor and the optical particle counter are arranged at different locations, for example, water sensor is disposed downstream or upstream of the optical particle counter or both water sensor and particle counter are disposed in parallel in the

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non-aqueous liquid. Lepper, Jr., from the same field of endeavor, teaches that the particle counter (12) is disposed upstream of a flow meter (44) (see figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to alternatively rearrange the particle counter and water sensor in different ways in the non-aqueous liquid because they would function in the same manner. In addition, it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Regarding claim 21, Lepper, Jr. teaches the use of a valve (56) for controlling the flow of the sample. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include in Klein and Altemose et al a valve as taught by Lepper Jr. that coupled to the processing circuit for the purpose of controlling the sample passing through the particle counter and water sensor.

#### ***Allowable Subject Matter***

5. Claims 22-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claim 37-45 are allowed.

#### ***Response to Arguments***

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7. Applicant's arguments with respect to claims 1-7, 10, 12-16, 18-19, 21-33, 37-45 have been considered but are moot in view of the new ground(s) of rejection.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Meyer (5,377,005) discloses a method and apparatus for measuring both turbidity and concentration in a fluid.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa Q. Pham whose telephone number is (571) 272-2426. The examiner can normally be reached on 7:30AM to 6 PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Hoa Q. Pham  
Primary Examiner  
Art Unit 2877

HP  
May 1, 2006